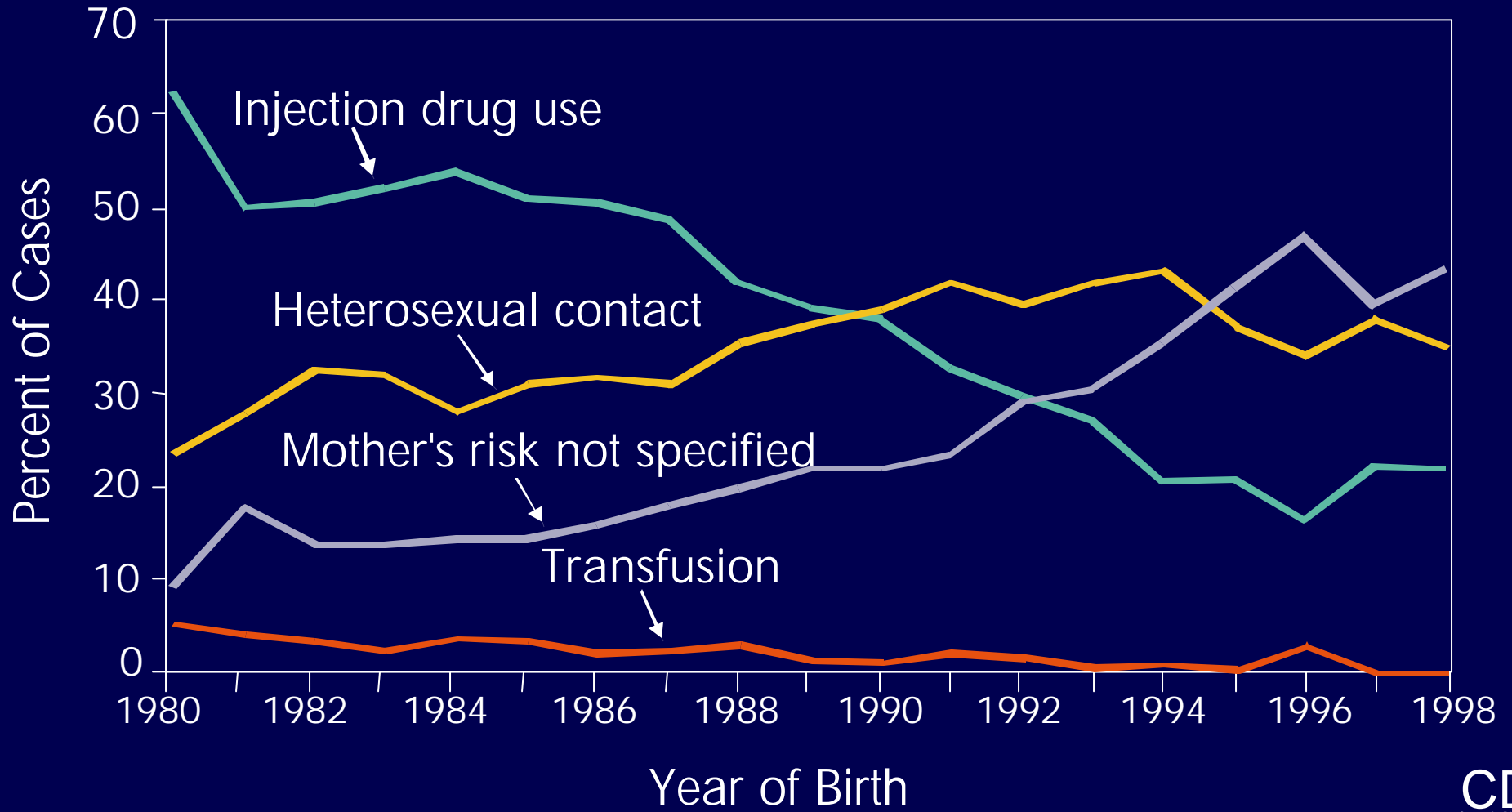


Mother's Exposure Category by Year of Child's Birth for Perinatally Acquired AIDS, 1980-1998, United States



Mother's Exposure Category by Year of Child's Birth for Perinatally Acquired AIDS, 1980-1998, United States

Among children who were infected perinatally and developed AIDS, the distribution of their mothers' exposure categories has changed over time. In the early 1980s, the majority of these women were exposed to HIV through injection drug use, and only 10-15% of the women were initially reported without a risk. In 1998, 21% of these women were known to be exposed to HIV through injection drug use, and 44% were initially reported without a risk specified. Most of the cases reported without a risk will be reclassified to the recognized risk categories as further information is reported and may well be identified as having been infected through heterosexual transmission. In addition, the proportion of women exposed to HIV by a heterosexual partner HIV-infected or with a known risk has increased from 22% in 1980 to 35% in 1998. Not surprisingly, these trends are similar to those seen among women with AIDS.

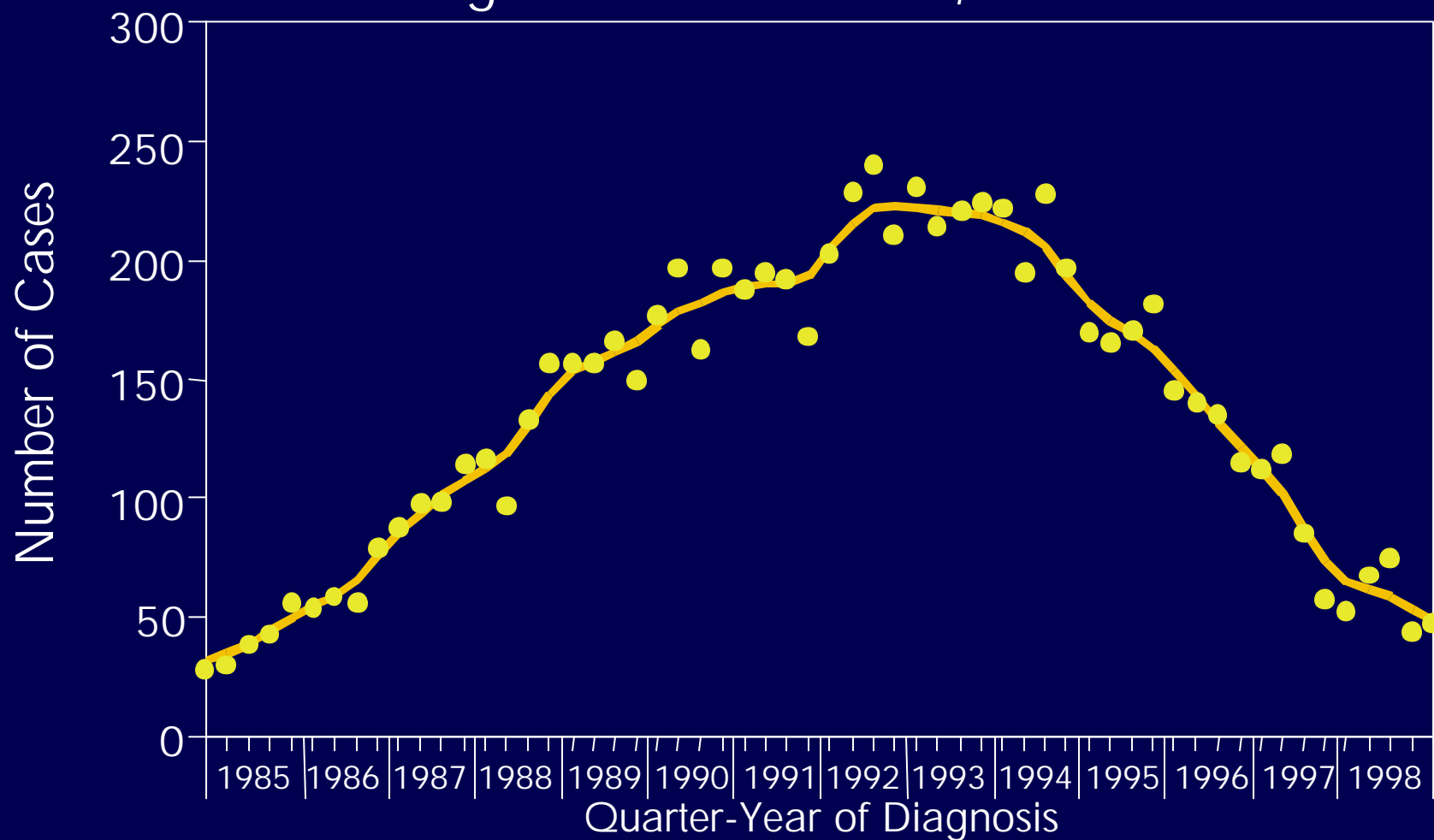
AIDS in Children <13 Years of Age by Exposure Category Reported in 1999 and Cumulative, United States

<u>Exposure Category</u>	<u>1999</u>		<u>Cumulative 1982-1999</u>	
	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>
Perinatally acquired	232	88	7,943	91
Transfusion-associated	2	1	379	4
Hemophilia	3	1	235	3
<u>Other/not reported</u>	<u>26</u>	<u>10</u>	<u>161</u>	<u>2</u>
Total	263	100	8,718	100

AIDS in Children <13 Years of Age, by Exposure Category Reported in 1999 and Cumulative, United States

In 1999, 263 children were reported to CDC with AIDS, a marked decrease from 382 in 1998. Eighty-eight percent of these children acquired HIV infection perinatally, that is, from their mother during pregnancy. Since the beginning of the AIDS epidemic, 8,718 children have been reported with AIDS. Again, the majority of these children (91%) were infected perinatally. Another 4 % acquired HIV from a blood or blood product transfusion, and 3% because of their hemophilia. Of the 2% of children with “other or not reported exposure”, 147 had an unidentified risk, 2 were exposed to HIV-infected blood in a household setting and 12 children had sexual contact with an adult with or at high risk for HIV infection. Nearly all newly infected children acquire HIV perinatally from their mothers.

Perinately Acquired AIDS Cases by Quarter-Year of Diagnosis* 1985-1998, United States



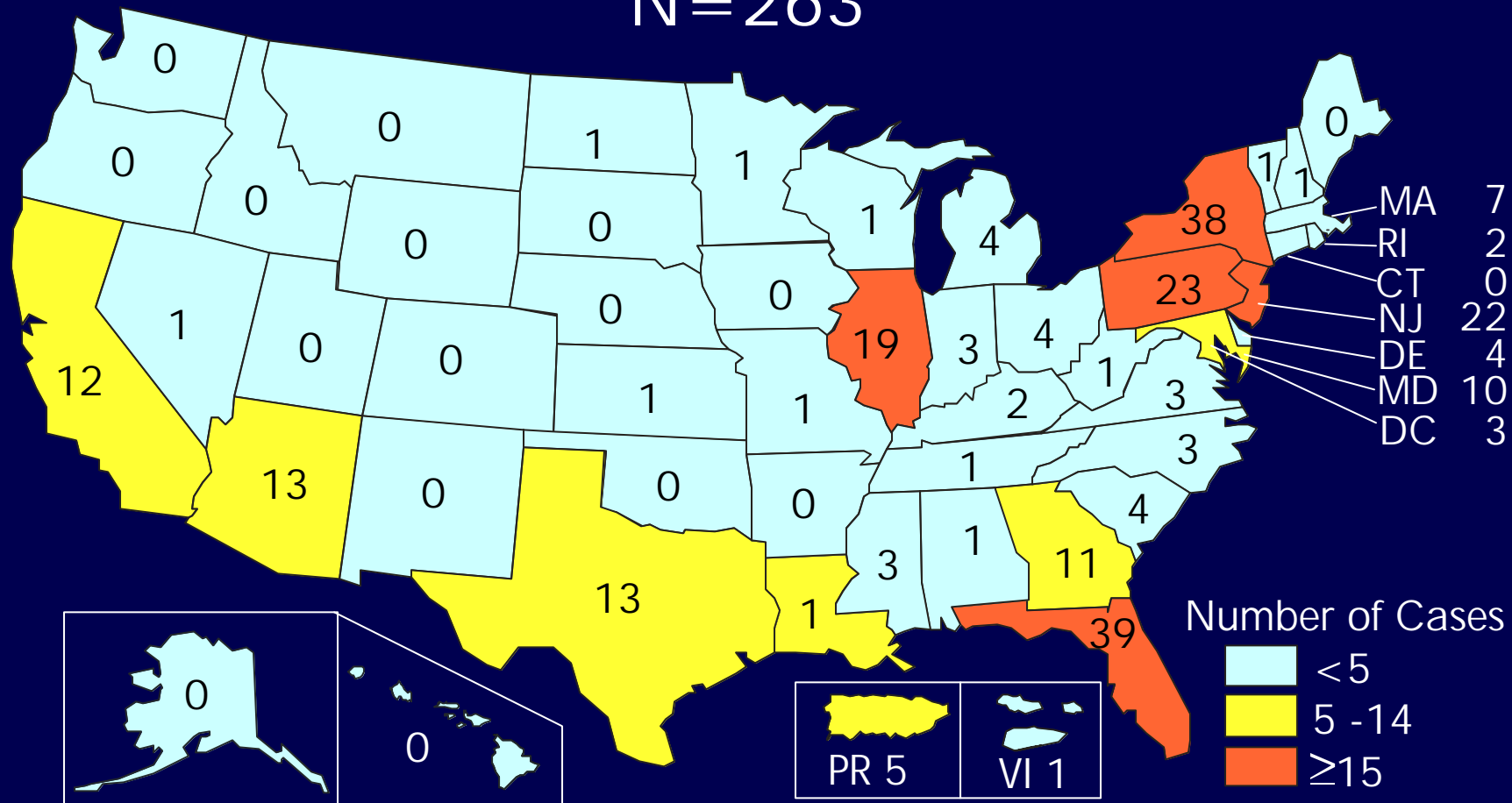
*Adjusted for reporting delays and redistribution of NIRs, data reported through December 1999

Perinatally Acquired AIDS Cases by Quarter-Year of Diagnosis, 1985-1998, United States

The incidence of perinatally acquired AIDS peaked in 1992 and has decreased in recent years. Studies and surveillance data suggest that the implementation of Public Health Service guidelines for universal counseling and voluntary HIV testing of pregnant women and the use of zidovudine by pregnant women and administered to newborn infants account primarily for the decline. Other contributing factors include the increasing proportion of HIV-infected childbearing women who received ZDV therapy before and during pregnancy for treatment of their HIV disease and the use of prophylaxis to prevent AIDS opportunistic infections among children.

Pediatric AIDS Cases Reported in 1999

N=263

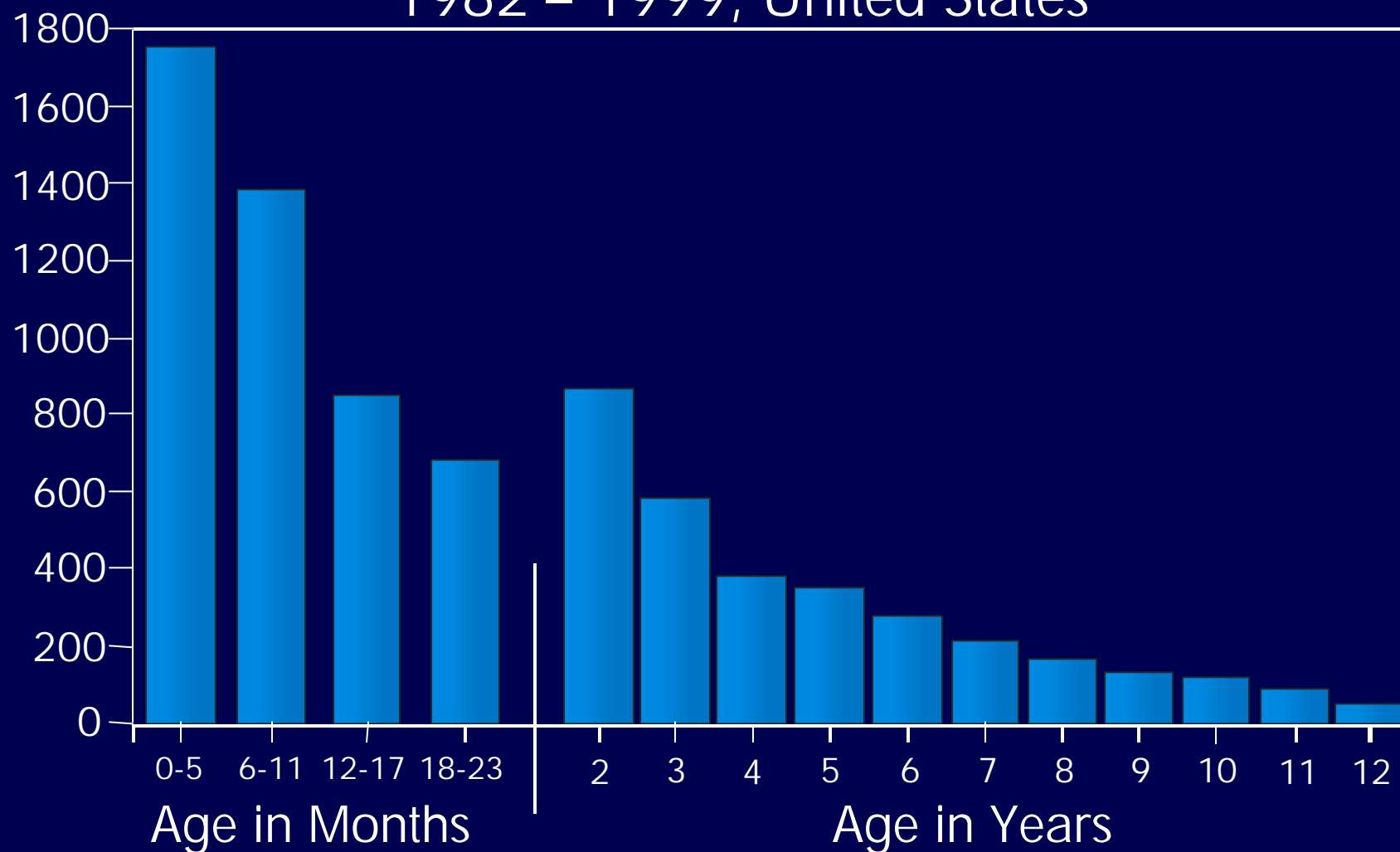


Pediatric AIDS Cases Reported in 1999

In 1999, 263 cases of AIDS were reported among children less than 13 years of age, a decrease from 382 in 1998. After follow-up for risk exposure, nearly all of the recent AIDS cases reported in children are found to be acquired through mother-to-child, or perinatal, transmission. New York and Florida reported the greatest number of cases, followed by Pennsylvania, New Jersey, Illinois and Texas. Seventeen states did not report any pediatric AIDS cases in 1998.

Reasons for the decrease in pediatric AIDS include the prevention of perinatal transmission through increasing use of antiretroviral therapies, improvements in the clinical management of women and children, and decreases in the number of HIV-infected women giving birth. Surveillance data and studies suggest that successful implementation of U.S. Public Health Service guidelines for universal counseling and voluntary HIV testing of pregnant women and the use of zidovudine by pregnant women and administered to newborn infants are the factors that account for the substantial and sustained decline in perinatally acquired AIDS.

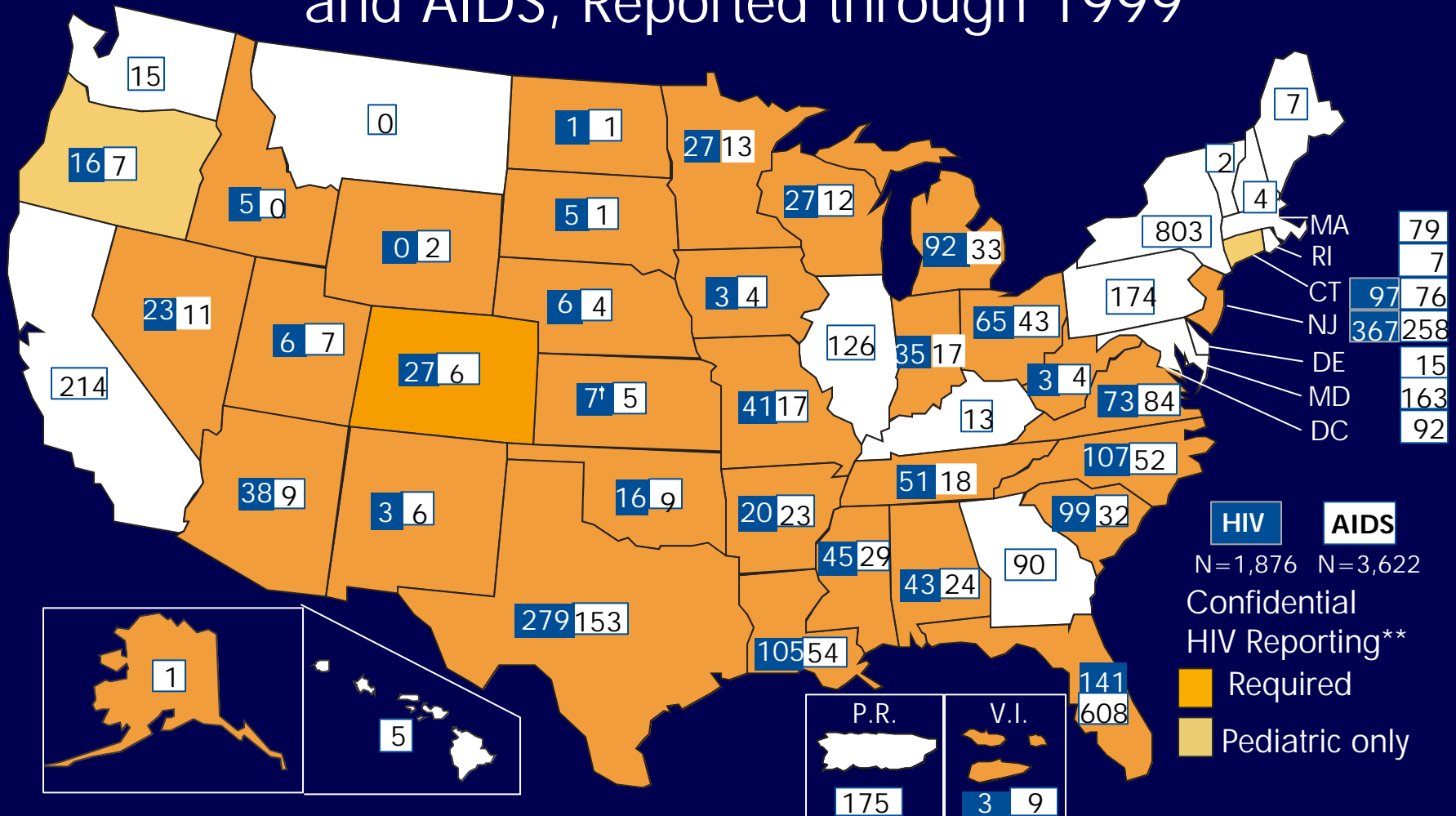
Perinately Acquired AIDS Cases by Age at Diagnosis 1982 – 1999, United States



Perinatally Acquired AIDS Cases by Age at Diagnosis, 1982-1999, United States

Nearly 40% of children with perinatally acquired AIDS were diagnosed within the first year of life; 22% were diagnosed within the first 6 months. This distribution could change if more HIV-infected childbearing women become aware of their HIV status and seek medical care early in their infant's life when treatment could possibly prevent the progression from HIV infection to AIDS.

Children <13 Years of Age Living with HIV Infection* and AIDS, Reported through 1999



* 34 areas conduct confidential HIV infection surveillance for children <13 years old

**HIV cases reported by patient name

† HIV infection reporting initiated in July 1999

Children <13 Years of Age Living with HIV Infection and AIDS, Reported through 1999

As of December 31, 1999, 3,622 children were reported to be living with AIDS in the United States, Puerto Rico, and the Virgin Islands. An additional 1,876 children were known to be infected with HIV in the 34 areas that conduct confidential (name-based) HIV infection case surveillance. The reported number of infected children is an underestimate of the population of infected children as some states do not report HIV infection to CDC, including several states with high AIDS morbidity. These data are useful in planning for the medical and social services that are required now and in the future for this population.

AIDS-Defining Conditions Most Commonly Reported for Children <13 Years of Age, N=8,718, Reported through 1999, United States

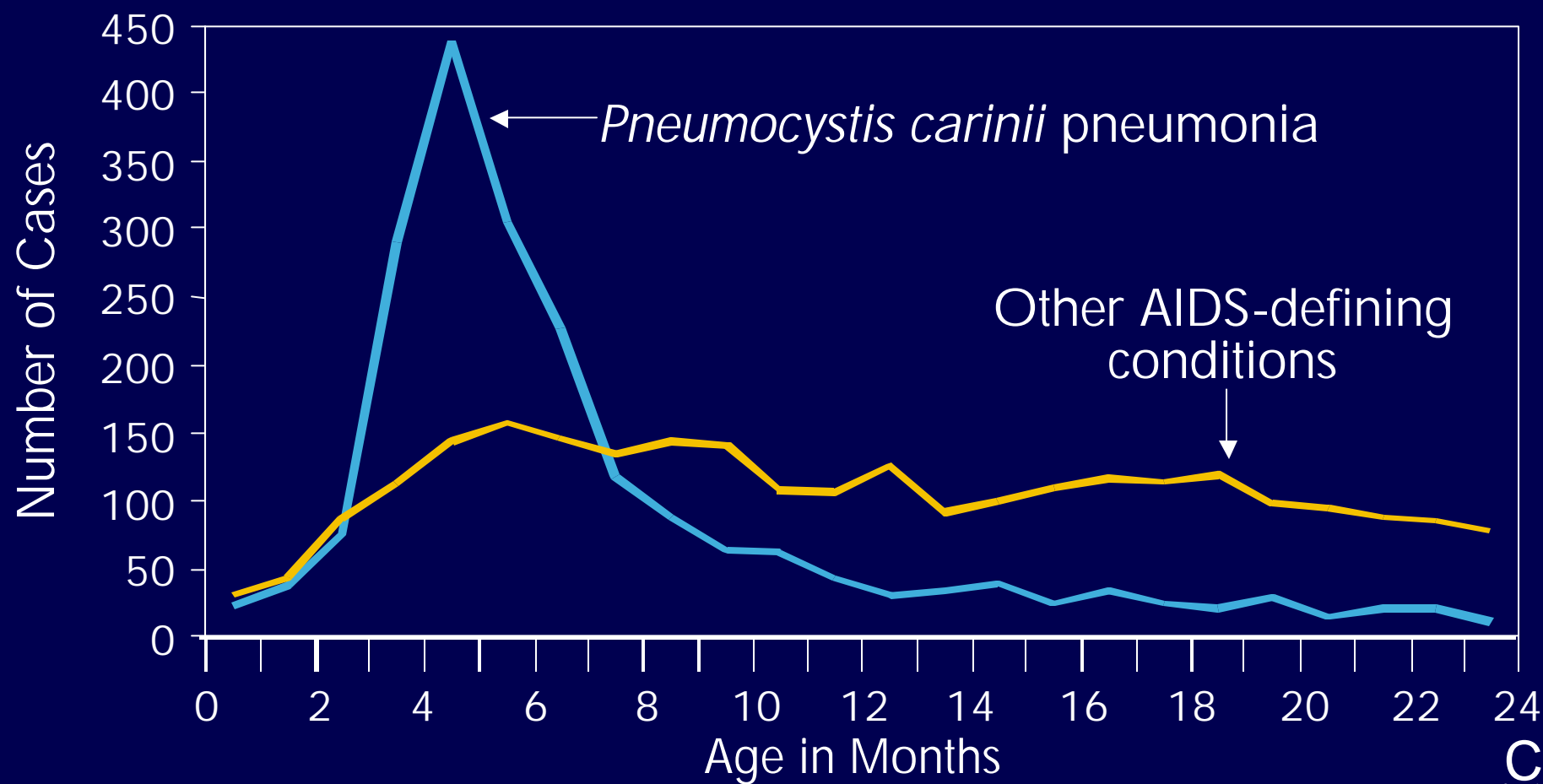
<u>Condition</u>	<u>Number</u>	<u>% of Cases*</u>
<i>Pneumocystis carinii</i> pneumonia	2900	33
Lymphoid interstitial pneumonitis	2061	24
Recurrent bacterial infections	1794	21
HIV wasting syndrome	1564	18
HIV encephalopathy	1462	17
Candida esophagitis	1372	16
Cytomegalovirus disease	838	10
<i>Mycobacterium avium</i> infection	709	8
Severe herpes simplex infection	422	5
Cryptosporidiosis	418	5
Pulmonary candidiasis	326	4

* >1 diagnosis reported for some children

AIDS-Defining Conditions Most Commonly Reported for Children <13 Years of Age, Reported through 1999, United States

AIDS-defining conditions are the clinical diagnoses reported when a person is determined to have AIDS. The most commonly reported conditions for children are listed. One third of children with AIDS have been diagnosed with *Pneumocystis carinii* pneumonia, and another 24% with lymphoid interstitial pneumonitis. The list of conditions presented is based on cumulative data since the beginning of the epidemic; however, the most commonly reported conditions for children diagnosed more recently have not changed from those reported in earlier years. The case definition for children was not affected by the expanded AIDS criteria added for persons ≥ 13 years of age in 1993.

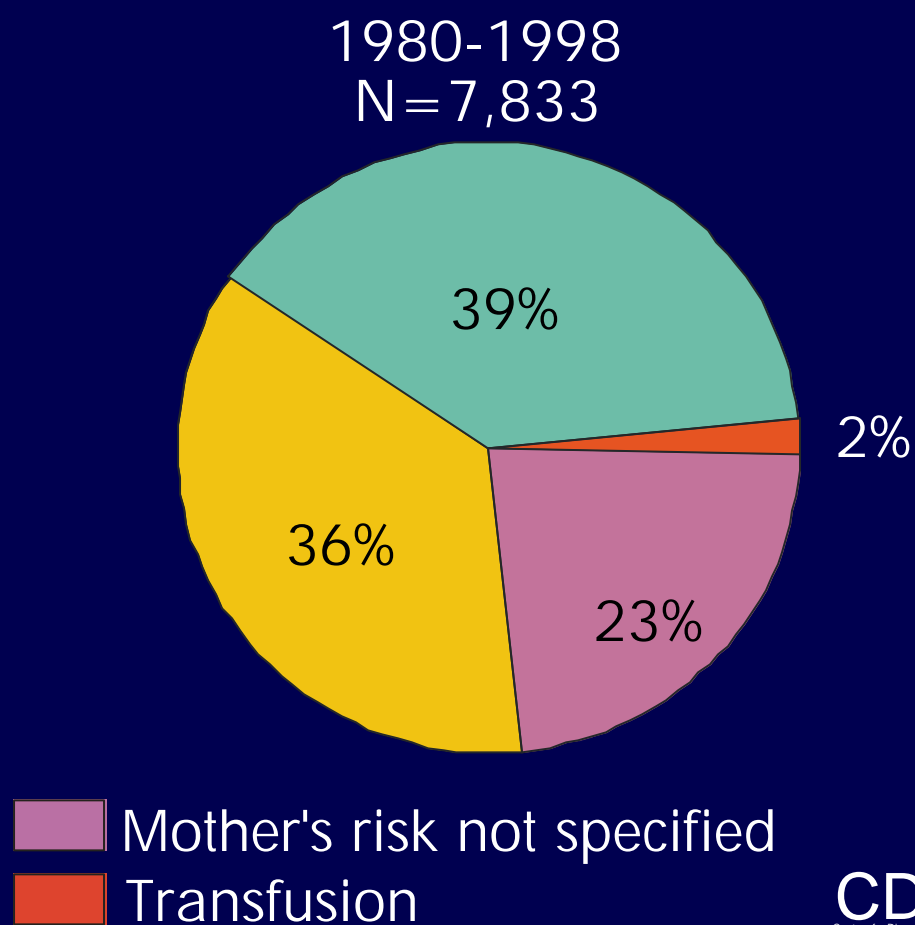
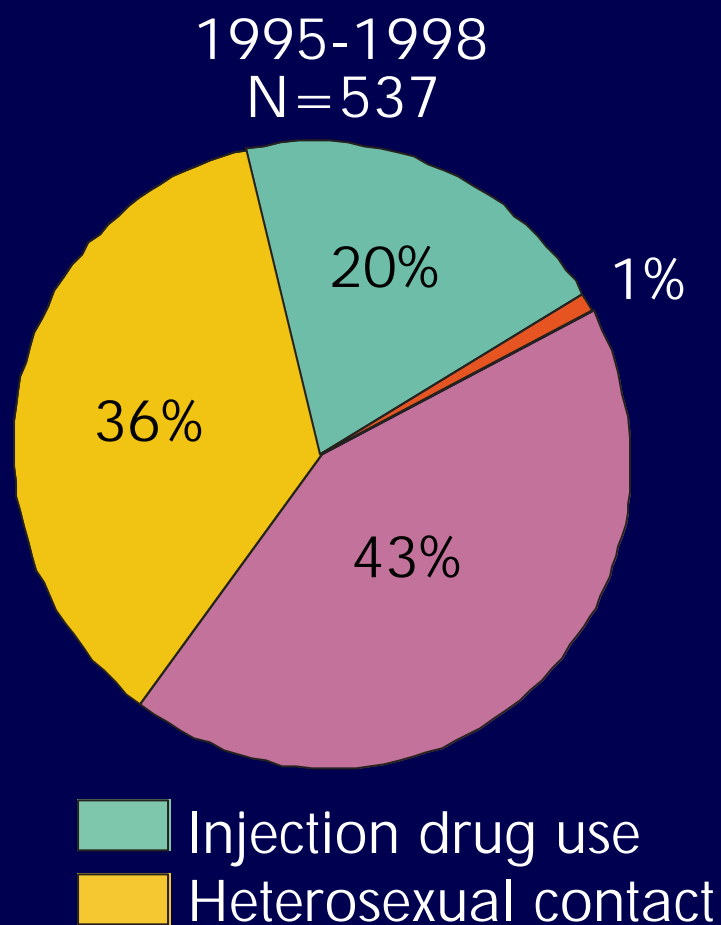
AIDS-Defining Conditions by Age at Diagnosis for Perinatally-Acquired AIDS Cases Reported through 1999, United States



AIDS-Defining Conditions by Age at Diagnosis for Perinatally Acquired AIDS Cases, Reported through 1999, United States

The peak incidence of *Pneumocystis carinii* pneumonia (PCP) in children with perinatally acquired AIDS is 3 to 6 months of age. The age at diagnosis for the other AIDS-defining conditions is much more evenly distributed during the first 2 years of life. Because of the early presentation of PCP, recommendations for all perinatally HIV-exposed children are for PCP prophylaxis to begin at 6 weeks of age. The occurrence of PCP in children may indicate missed opportunities for maternal testing in pregnancy, ZDV treatment to prevent transmission, or therapy including PCP prophylaxis in HIV-exposed children. CDC has a priority initiative to reduce HIV transmission from mothers to children by promoting voluntary maternal testing prenatally (intrapartum if women do not receive prenatal care) and ZDV therapy.

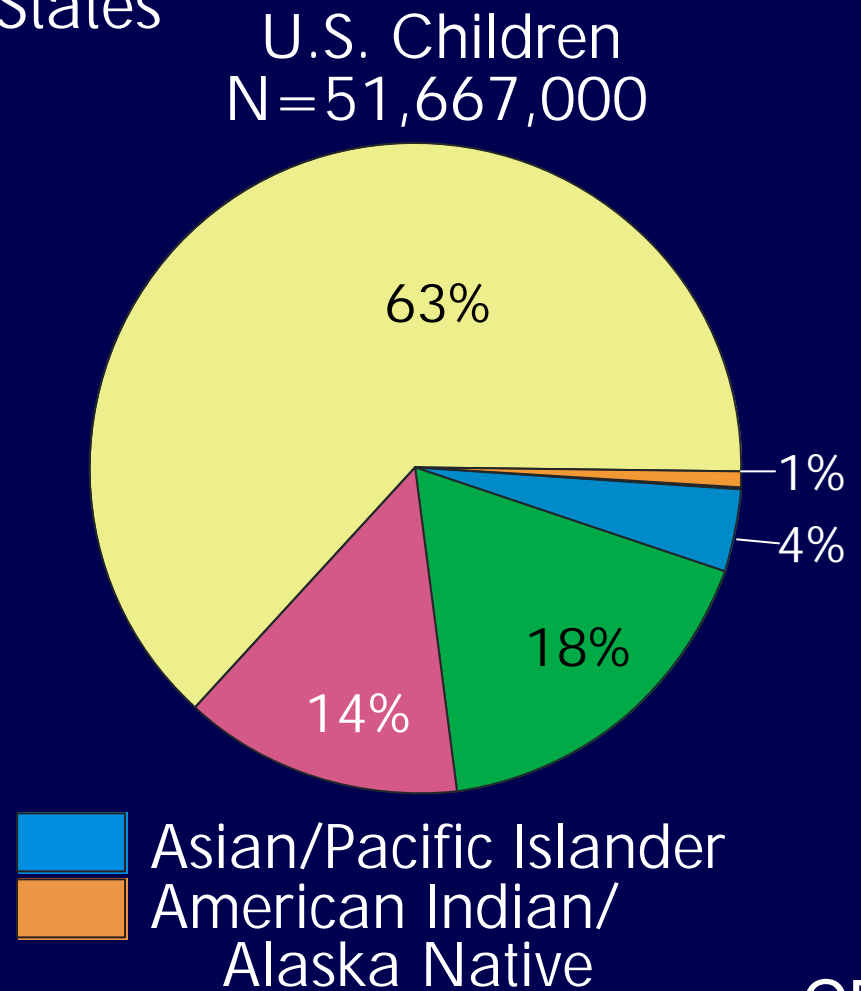
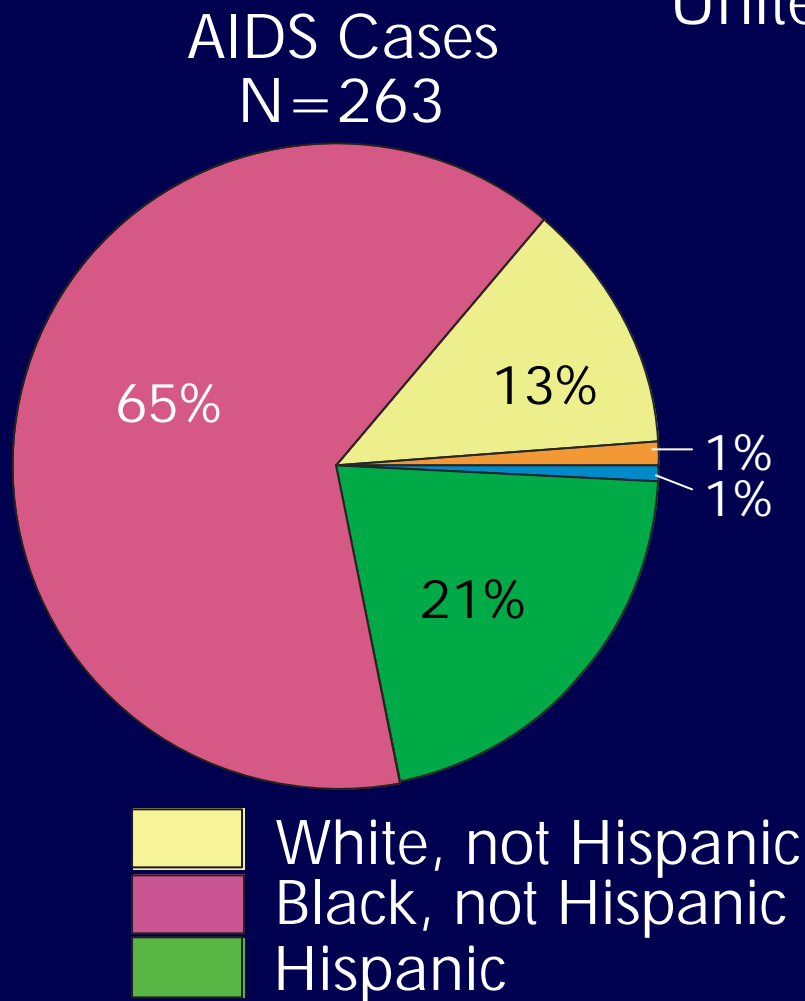
Mother's Exposure Category for Perinatally Acquired AIDS by Year of Child's Birth, 1995-1998 and Cumulative United States



Mother's Exposure Category for Perinatally Acquired AIDS by Year of Child's Birth, 1995-1998 and Cumulative, United States

Since the beginning of the epidemic, the proportional distribution of risk exposures for HIV infection among the mothers of children with perinatally acquired AIDS has changed. In recent years, HIV infection was attributed to injection drug use (IDU) by 20% of the mothers, and 43% of the women did not specify their risk. In the past, a larger proportion of women attributed their infection to IDU and fewer had an unspecified risk. It is likely that some proportion of the women without a specified risk were exposed through heterosexual contact.

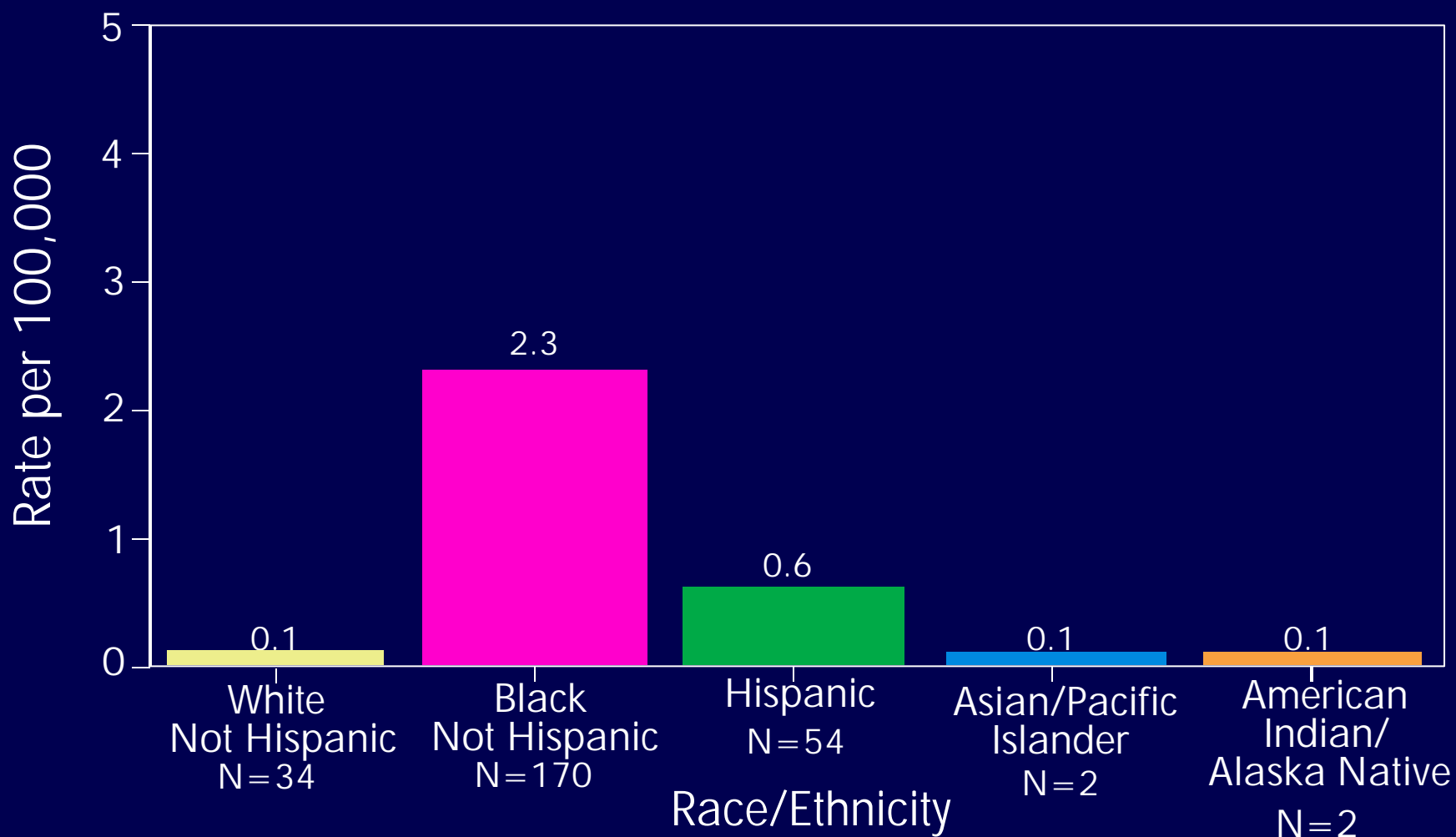
AIDS Cases in Children <13 Years of Age, Reported in 1999 and 1999 Population Estimates of Children, by Race/Ethnicity United States



AIDS in Children <13 Years of Age Reported in 1999 and 1999 Population Estimates of Children by Race/Ethnicity, United States

AIDS has disproportionately affected black and Hispanic children in the United States. Although only 14% of children in the United States are black, 65% of children reported with AIDS in 1999 are black. Similarly, 21% of children reported with AIDS are Hispanic, which is more than the 18% of U.S. children who are Hispanic. The proportion of cases among white and Asian/Pacific Islander children is lower than the proportion of these races in the total population, and the proportions are equal for American Indian/Alaska Native children.

AIDS Rates per 100,000 Children <13 Years of Age by Race/Ethnicity, Reported in 1999*, United States



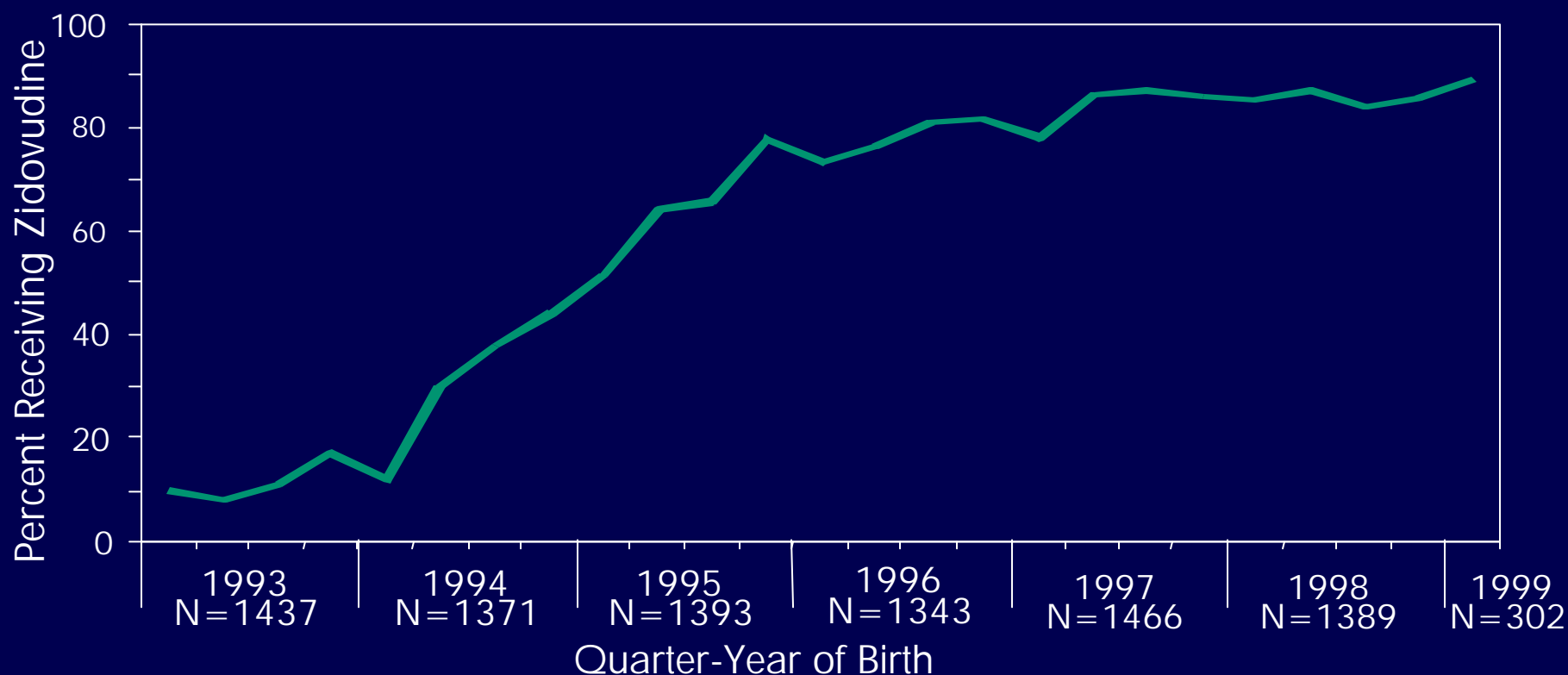
*US Rate=0.5/100,000 N=263

Total includes 1 case whose race/ethnicity is unknown

AIDS Rates per 100,000 Children <13 Years of Age by Race/Ethnicity, Reported in 1999, United States

The rate of AIDS among black children in 1999, 2.3 per 100,000 children, was 23 times higher than among white children (0.1 per 100,000) and nearly 4 times higher than among Hispanic children (0.6 per 100,000). Because the majority of pediatric cases of AIDS are attributed to perinatal HIV transmission, these rates also reflect the disproportionate racial/ethnic distribution of HIV and AIDS among black and Hispanic women in the United States.

Percent of Perinatally HIV Exposed or Infected Children who Received or whose Mothers Received any ZDV* Born 1993-March 1999 in 34 States,[†] United States



*Any ZDV=Prenatal, intrapartum, or neonatal receipt of Zidovudine to reduce perinatal HIV transmission

[†] Includes 34 areas that conduct pediatric HIV Surveillance; data reported through December 1999

Percent of Perinatally HIV Exposed or Infected Children who Received or whose Mothers Received any ZDV, Born 1993-March 1999 in 34 States, United States

In April 1994, the Public Health Service released guidelines for zidovudine (ZDV) use to reduce perinatal HIV transmission; in 1995 recommendations for HIV counseling and voluntary testing for pregnant women were published. Since then, the percent of perinatally HIV-exposed or HIV-infected children who received ZDV or whose mother received ZDV has increased markedly. This increase in ZDV use, including prenatal, intrapartum, or neonatal receipt of ZDV, has been accompanied by a decrease in the number of perinatally HIV-infected children and is responsible for the dramatic decline in perinatally acquired AIDS.

Time of Maternal HIV Testing among Children Perinatally Exposed or Infected or with AIDS, Reported in 1999,* United States

Time of maternal HIV test	Perinatally Acquired AIDS N=232		HIV Exposed** N=1966		HIV Infected** N=197	
	No.	%	No.	%	No.	%
Before or at birth	81	35	1844	94	132	67
After birth	75	32	71	4	39	20
Unknown	76	33	51	3	26	13

* Excludes 31 children with AIDS reported in 1999 whose HIV exposure category was unknown or other than perinatal

** From 34 areas with confidential pediatric HIV infection surveillance

Time of Maternal HIV Testing among Children Perinatally Exposed or Infected or with AIDS, Reported in 1999, United States

It is important for HIV-infected pregnant women to know their HIV status so they can make informed decisions about antiretroviral therapy to reduce perinatal transmission of HIV to their infants. The Public Health Service recommends that all pregnant women be offered HIV counseling and voluntary HIV testing. For children reported to CDC in 1999 as perinatally exposed to HIV, 94% were born to women who were tested before or at the time of birth. For children who were perinatally HIV-infected, 67% of them had a mother who was tested before or at birth; among children diagnosed with AIDS, only one third were born to women tested before or at birth. An additional 20% of infected children and 32% of children with AIDS were born to mothers tested after the children's birth. These data demonstrate that early testing and, therefore, the increased potential for ZDV therapy to prevent transmission, can help to reduce HIV infection among children.